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The Social Class Origins of U.S. Teachers, 1860–1920

1. Introduction

U.S. teachers have long been neglected in the history of education in spite of their important roles in education. Clifford calls this neglect a "virtual invisibility of teachers."[1] Hence, it is not surprising to encounter immense difficulty in tracing the social class origins of teachers in the late nineteenth and early twentieth centuries. This task is of great importance, however, because it allows one to understand the circumstances surrounding the individuals that entered the profession, to speculate on the quality of teaching, and to form an idea about class bias, intentional or not, inculcated by teachers in classrooms.

Research on the social class origins has been done for a century, as discussed in the next section. However, most of the research missed the broad picture of the profession. Some attention was paid to students in one college or normal school in one state even if few teachers attained such a high level of education at the time. In fact, a serious attempt was made to collect nationally representative data of teachers, but the data are severely biased. Of course, anecdotal evidence for the origins is scattered in qualitative historical materials such as diaries, letters, memoirs, and vacancy advertisements, but this evidence is highly selective. No one, to the best of my knowledge, has investigated the social class origins of U.S. teachers from 1860 to 1920 with nationally representative data, which would make one's understanding of the issue more comprehensive in terms of space and time.

This paper leads this line of study. In particular, this paper directly responds to the question raised by Perlmann and Margo, "Was teaching an engine of upward mobility into the middle class for relatively well-educated daughters of skilled workers and of low manual workers?"[2] They propose using census data to answer this question because the data allow for a much wider perspective in terms of space and time. This paper closely follows their proposition and tries to answer the above question. Reaching further, OLS analyses are performed to

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find the factors related to the social class origins of teachers and to estimate their effects, which would present a more systematic picture of their origins.

Our short answer to the question is a qualified no. The answer is "no" because most of the teachers came from the middle class and farms and were overrepresented in relation to the general population. Moreover, this bias in favor of the middle class and farms became larger with the passage of time. This no is "qualified" because teaching was indeed an engine of upward mobility for daughters from the middle class and farms in the main, but not for daughters of skilled workers and of low manual workers. Measured by Duncan's socioeconomic index (SEI), their status substantially improved, but the size of the improvement gradually decreased. Finally, the following characteristics are found to be related to better social class origins as measured by Duncan's SEI of the father's occupation: native born fathers residing in a larger place and non-farm households outside the Northeast in later years. On the opposite side of the story is that teachers who had the opposite characteristics enjoyed upward mobility most.

This paper is structured as follows. The relevant literature is briefly reviewed in Section 2, followed by a short introduction of the data in Section 3. Results are explained in Section 4, and Section 5 concludes.

2. Literature Review

Some attempts have been made to understand the social class origins of U.S. teachers during the period of interest, but it is rare to find research that covers the entire country over a long period of time with variables of representative samples measured in a consistent fashion. Coffman is the first to contribute to this literature, and his study is the most comprehensive to date.[3] He intended to collect random samples by distributing questionnaires that contained 16 questions in convention under the county superintendent, the city superintendent or some representative of these officers in 1910. However, the data cover just one year and are from only 17 states, with the West being completely excluded.[4] Also, the sample is highly selective in spite of his initial intentions. For example, among male respondents to the father's occupation, about a third of them are from Indiana.[5] The problems notwithstanding, he found that 15.0 percent of male teachers and 27.7 percent of female teachers had fathers who were artisans or laborers when they began teaching.[6]

Subsequently, Hill and Moffett made another attempt to claim that their typical student shared family backgrounds similar to that of Coffman even more than 15 years after the latter study.[7] However, both focused not on teachers, but on students at one college, the Teachers College at Columbia University. Similarly, Gordon studies the social backgrounds of students at Smith College, but this college was not even an institution for teacher training.[8] Because of the characteristics of the college, it is inevitable that her sample is biased in favor of persons from urban backgrounds. Among students who were offered admission to the college (classes 1882-1888), only 5.0 percent had fathers who were farmers whereas the fathers of 53.4 percent of the students were engaged in professional and business occupations.[9] Bernard and Vinovskis look beyond a single school to chart the occupations of the fathers of select students in a number of Massachusetts normal schools in 1859.[10] Although the distribution of the

occupations differed depending on coeducation status, overall, farmers were the largest group, accounting for 43.1 percent, followed by artisans (28.5 percent) and merchants-managers (11.7 percent).[11]

Even if other issues such as space and time coverage are ignored, the main problem with these four studies is that the students who were enrolled in normal schools or colleges were a highly selective group. Also, not all students at teachers' colleges or normal schools graduated, and even when they did, not all of them became teachers. More important, it was the exception rather than the rule to become a teacher through these institutes, let alone regular colleges, during the period. The problem of selectivity can be illustrated by Bernard and Vinovskis, according to whom, about 20 to 80 percent of the students admitted two years earlier graduated.[12] Also, at Bridgewater Normal School, all eight male graduates, but only four out of six female graduates entered the profession in the spring of 1855 while 11 of 14 male graduates and 18 of 22 female graduates did so in 1859.[13] Moreover, Massachusetts normal school graduates accounted for only 6.3 percent of the state's teachers, or 16.4 percent of its annual number of new teachers entering the classroom.[14]

This paper improves on this literature. Permann and Margo suggest a useful method to ascertain quantitatively the social class origins of U.S. teachers.[15] The space extends beyond one school or one state to the entire country, sample selectivity is minimized as much as possible, and the time covered is long enough to understand general trends in the social class origins of U.S. teachers. In addition, variables including occupations are comparable across years, meaning that the trends will not be distorted by possible idiosyncrasies in classifications of occupations.

3. Data

The main data set for this paper is the Integrated Public Use Microdata Series (IPUMS-USA) from 1860 to 1920.[16] Census data lack many important variables such as income, wage, earnings, work experience, tenure, and grade that are necessary for the purposes of this paper, and more critically, the occupations of fathers are not recorded for all teachers in the data. In spite of the disadvantages, the data do closely meet the requirements just mentioned, so these advantages are exploited to provide new, broad perspectives on the issue.

Teachers are defined as individuals whose occupation is coded as "teachers (n.e.c.)" (code number 93) based on the 1950 Census Bureau occupational classification system and whose industry is coded as "educational services" (code number 888) based on the 1950 Census Bureau industrial classification system. Occupation represents the individual's primary occupation, so this coding is problematic for individuals who had more than one occupation. This issue merits special attention because it is documented that some teachers, although the proportion is unknown, supplemented their wages by taking up other jobs such as farming, bell-ringing, and grave-digging.[17] However, as school terms became longer and the occupation became professionalized, it became difficult for them to engage in more than one occupation. Hence, although caution is still required for interpretation of what "teacher" represents in this paper, the ambiguity inherent in this classification should be minor.

Measuring social class is another important issue.[18] Some measures reflect occupational and personal characteristics whereas others are restricted to only occupational characteristics. Social class can be classified based on the writings of Karl Marx or Max Weber. Even when attention is confined to strictly occupational characteristics, as seen in works by Weber, questions such as what occupational characteristics are selected still remain. Occupational education and income (or wage, earnings) are widely used, so let us suppose that these characteristics have been selected. Even then, one would wonder how to transform this into a unidimensional scale of social class if unidimensionality itself were not open to debate. Once the measure is calculated, the issue of interpretation still remains to be resolved. For example, does moving up from 90 to 100 on the scale have the same meaning as moving up from 0 to 10, whatever the meaning is? There is significant debate on every aspect of measures of social class, and this paper scratches only the surface. However, this paper does not dwell further on the debate, but one should keep in mind that the measure used below is not the only or even necessarily the best way to measure social class.

Imperfect as it may be, among many measures of social class, Duncan's SEI is widely used in social research.[19] This index is essentially the (almost equally) weighted sum of occupational education and occupational income. He calculates this index based on income and education data from the 1950 Census and the occupational prestige ratings of the 1947 National Opinion Research Center survey/the North-Hatt study, meaning that bias as a result of relying on these specific dates can be of concern. For example, if teaching commanded a higher level of SES in 1950 than in earlier periods, the index number of teaching in earlier periods would be overestimated.

For this and other similar reasons, some researchers argue that composite measures including Duncan's SEI represent a poor measure for intergenerational occupational mobility, suggesting the use of dimension-specific measures such as occupational income or education. Although this argument has some merit, composite measures are better suited for the purposes of this paper. Depending on the definition of social class, controversy could arise over the measurement of class origins. And yet, this paper is more interested in comprehensive views of intergenerational mobility than just one aspect of it, whether it be income or education. Moreover, Klatzky and Hodges demonstrate that any distortions involved in temporal comparisons are unlikely to invalidate the substance of the research.[20] Hence, Duncan's SEI is adopted for this analysis. However, it should be stressed that other measures of social class or occupational standing provided in the IPUMS-USA yield similar results. Robustness checks are performed below.

4. Results

4.1. Sample Selection

The sample is restricted to white female teachers who lived in nuclear families and whose fathers were present during the period from 1860 to 1920 (see the appendix for further discussion).[21] White is the focal race because they accounted for 95.1 percent of all teachers in the United States as late as 1920. White teachers taught not only white but also black students, and it was out of

the question for black teachers to teach white students. Even in cases where black teachers taught black students, pupil-teacher ratios for black students were much larger than for white students. Hence, the proportion of black teachers was less than half of the proportion of the black population. The female gender is selected because, as feminization of teaching continued rapidly in the period, women's presence became disproportionally large, reaching 84.01 percent in 1920. Teachers who lived in nuclear families are chosen because, by construction of the data, only they can potentially indicate their fathers' occupations, which proxy social class origins. However, fathers were not present all the time. Hence, the final criterion is the presence of a father. The period from 1860 to 1920 is the focus for two reasons. A practical reason is that, as more men started becoming teachers and the marriage bar was lowered after 1920, the select group became less representative of the occupation. A topical reason is that this period is one of the most dynamic periods in the history of U.S. education, when two important characteristics of the occupation were established, namely, feminization and bureaucratization. Although the sample selected as such is not representative of all teachers, what they describe should not be dissimilar to a typical teacher, considering their numerical weight.

4.2. Social Class Origins: All Regions

Three categories of social class are formed. The middle class consists of the occupations of professional, technical, managers, officials, proprietors, and clerical and kindred, while the lower class consists of the occupations of sales workers, craftsmen, operatives, service workers, farm laborers, and laborers in addition to unemployed individuals. Perlmann and Margo wonder whether teaching provided a steppingstone for upward mobility for daughters from the lower class, so the interpretation mainly concerns the statistics of the lower class and of the other two categories. For convenience, the upper class is subsumed within the middle class. Farmer is not a category of social class, but because a substantial number of people worked in farms, this single occupation is presented in parallel with the middle class and the lower class. There is no a priori reason to insist on this categorization. Categories can be narrowly or broadly defined. Alternatively, one occupation can be transferred from one category to another. By and large, however, the present categorization makes interpretation easier and is a better conceptual fit with the occupational standing of each occupation measured by various indexes.

Table 1 documents trends in the social class of the sample. As most of the white people lived in rural areas, it is not surprising to find that farmers accounted for a large proportion of social class origins, namely 43.5 percent for all years. However, as industrialization swept the country, the proportion of farmers decreased from 63.0 percent in 1860 to 37.2 percent in 1920. The levels of and changes in the proportion of farmers accurately reflect changes in the industrial structure of the period. The proportion of farmers in 1860 is larger than 43.1 percent obtained from students at Massachusetts normal schools in 1859 by Bernard and Vinovskis, which partially reflects the urban bias of the state.[22] Also, the proportion of farmers in 1910, that is, 37.7 percent, is slightly lower than 44.8 percent that Coffman reported for female teachers.[23]

Table 1. Trends in the Social Class Origins of White Female Teachers: All Regions

	1860	1870	1880	1900	1910	1920	All Years
Middle Class	10.89	14.42	17.64	21.89	22.26	24.03	20.36
	(9.82)	(11.08)	(12.56)	(15.43)	(17.31)	(18.36)	(14.56)
Farmer	63.04	54.69	48.99	40.83	37.66	37.21	43.49
	(55.39)	(49.91)	(47.01)	(39.21)	(31.86)	(28.20)	(40.96)
Lower class	26.07	30.89	33.37	37.28	40.08	38.76	36.15
	(34.79)	(39.01)	(40.43)	(45.36)	(50.83)	(53.44)	(44.48)
N	349	437	7,320	7,423	2,884	2,459	20,872
	(15,752)	(23,578)	(323,755)	(258,706)	(99,160)	(81,989)	(802,940)

Notes: Numbers in parentheses represent corresponding proportions for white male household heads aged between 45 and 75 inclusive who lived in non-group quarter households. "All years" include years between 1860 and 1920. Samples are restricted to white female teachers who lived in nuclear families as children and whose fathers were present. The middle class consists of profession, technical, managers, officials, proprietors, and clerical and kindred. The lower class consists of sales workers, craftsmen, operatives, service workers, farm laborers, and laborers in addition to unemployed individuals. "n/a" indicates no data available.

Although changes in the social class origins of teachers closely follow changes in the industrial structure, the distribution of their origins could differ from that of the general population. In fact, this does seem to be the case. The figure in parentheses in each cell in Table 1 represents the corresponding figure for the general population.[24] In general, more teachers came from the middle class and farms relative to the general population across the years. Consequently, teachers from the lower class were underrepresented. Hence, a short answer to the question posed by Perlmann and Margo is no: teaching was *not* an engine of upward mobility into the middle class for relatively well-educated daughters of skilled workers and low manual workers. Of course, it would be misleading to argue that teaching did not play such a role at all. As listed in Table 1, some women from the lower class benefited from teaching, but compared to the general population, teaching was disproportionally represented by women from the middle class and farms.

One could suspect that this pattern emerges only among women. Because it is impossible to collect data on the father's occupation from the IPUMS-USA for all male teachers, no definitive evidence can be brought forth to dispel the suspicion. And yet, Table 2 verifies that the pattern seen for female teachers also emerges among their male counterparts. The only difference is the larger proportion of farmers as the social class origin of male teachers than female teachers, not to mention the general population.

Another interesting pattern is that, as time passed, more teachers came from the middle class and farms relative to the general population. In 1860, the proportions of women from the middle class were similar for both teachers and the general population, but the proportion for teachers became 30.9 percent larger than that of the general population in 1920. A similar pattern holds for the origin of farmer. As a result, although the proportion of the lower class among the general population grew, its proportion for teachers increased very slowly and even slightly decreased in 1920. Hence, it is likely that teaching was not only an occupation largely for people from the middle class or farms initially, but it became even more so with the passage of time. Although it would be hasty to derive implications for intergenerational upward mobility in U.S. society at this point, the findings indicate that intergenerational upward mobility became difficult at least through teaching.

Table 2. Trends in the Social Class Origins of White Male Teachers: All Regions

	1860	1870	1880	1900	1910	1920	All Years
Middle Class	9.86	9.65	15.26	14.42	12.47	18.48	14.52
Farmer	73.94	71.93	65.75	66.30	61.58	57.35	65.60
Lower class	16.20	18.42	18.99	19.29	25.95	24.17	19.88
N	142	114	1,848	1,623	393	211	4,331

Notes: "All years" include years between 1860 and 1920. Samples are restricted to white male teachers who lived in nuclear families as children and whose fathers were present. The middle class consists of profession, technical, managers, officials, proprietors, and clerical and kindred. The lower class consists of sales workers, craftsmen, operatives, service workers, farm laborers, and laborers in addition to unemployed individuals.

The national statistics sketch broad patterns of the social class origins of teachers, but it is possible that these patterns may not apply to other regions. As shown below, however, most of the broad patterns apply equally to each region. Hence, explanations of the patterns are not repeated below, but regionally distinctive patterns are briefly highlighted.

4.3. Social Class Origins: Northeast

One of the distinct characteristics of the Northeast is its early industrialization. Hence, Table 3 demonstrates that the proportion of the social origin of farmer was less than the national figure from 1860 onward, and the proportion plummeted to 18.8 percent in 1920. On the other hand, almost half of the teachers came from the lower class starting in 1900, so just in terms of absolute numbers, teaching appeared to help improve the social status of teachers. However, the proportion remained the same for the next two decades in spite of an increase in the proportion of the low class among the region's population, which is consistent with the increasing difficulty in upward mobility mentioned above.

4.4. Social Class Origins: Midwest

Contrary to the Northeast, the Midwest was predominantly characterized by farming. In fact, as reported in Table 4, 66.2 percent of the regional population lived in farms, and 73.1 percent of teachers came from farms in 1860. Although the latter dropped to 41.0 percent in 1920, the proportion was still more than twice that of the Northeast.

4.5. Social Class Origins: South

As in the Midwest, farming was also one of the main occupations in the South. In fact, there were proportionally more farmers in the South than in the Midwest. In both regions, according to Table 5, farmers accounted for 66 percent of the general population in 1860, but the proportion dropped to only 47.4 percent in the South, but to 30.5 percent in the Midwest by 1920. More important, farming in the South was based on large-scale plantations whereas family-based farming was prevalent in the Midwest. Hence, income inequality was greater in the South than in the Midwest, which means that the number of poor farmers was proportionally larger in the South.[25] These differences in farming and income distribution are reflected in the social class origins of teachers. Although the proportions of farmers among the general population were almost the same in both regions in 1860, only 59.1 percent of teachers in the South came from farms, which is 14 percentage points lower than that of the Midwest. Actually, the South was the only region where the proportion of teachers from farms was lower than that of the region's population. This pattern was reversed only in 1910, but the margin of the reversal remained small even in 1920, that is 52.1 percent versus 47.4 percent.[26]

Table 3. Trends in the Social Class Origins of White Female Teachers: Northeast

	1860	1870	1880	1900	1910	1920	All Years
Middle Class	12.18	13.27	16.32	23.01	25.65	30.78	20.54
	(12.09)	(12.63)	(14.32)	(17.63)	(21.09)	(21.11)	(16.55)
Farmers	56.85	47.87	42.55	27.43	23.83	18.84	34.21
	(42.80)	(35.06)	(29.88)	(20.61)	(14.79)	(11.27)	(24.28)
Lower class	30.96	38.86	41.13	49.56	50.52	50.38	45.25
	(45.12)	(52.31)	(55.79)	(61.76)	(64.13)	(67.62)	(59.18)
N	197	211	3,027	2,147	772	653	7,007
	(6,858)	(9,168)	(116,600)	(81,038)	(27,672)	(24,575)	(265,911)

Notes: Same as Table 1.

Table 4. Trends in the Social Class Origins of White Female Teachers: Midwest

	1860	1870	1880	1900	1910	1920	All Years
Middle Class	8.46	12.29	16.10	20.24	19.64	20.62	18.46
	(7.39)	(8.72)	(10.58)	(14.86)	(16.02)	(16.98)	(13.21)
Farmers	73.08	63.13	55.47	45.20	40.46	41.04	48.38
	(66.18)	(59.26)	(56.35)	(43.60)	(35.98)	(30.49)	(47.27)
Lower class	18.46	24.58	28.44	34.57	39.90	38.34	33.16
	(26.43)	(32.02)	(33.08)	(41.54)	(48.00)	(52.52)	(39.52)
N	130	179	3,330	3,622	1,263	1,072	9,596
	(4,816)	(8,333)	(121,821)	(104,123)	(35,473)	(30,675)	(305,241)

Notes: Same as Table 1.

Table 5. Trends in the Social Class Origins of White Female Teachers: South

	1860	1870	1880	1900	1910	1920	All Years
Middle Class	13.64	30.23	26.95	24.86	22.62	21.95	24.42
	(8.92)	(11.79)	(12.41)	(12.62)	(14.77)	(16.60)	(13.13)
Farmers	59.09	58.14	49.12	52.40	49.85	52.09	51.19
	(65.18)	(61.68)	(61.30)	(59.56)	(48.92)	(47.40)	(57.77)
Lower class	27.27	11.63	23.93	22.74	27.54	25.96	24.39
	(25.90)	(26.52)	(26.29)	(27.82)	(36.32)	(36.00)	(29.11)
N	22	43	794	1,271	650	574	3,354
	(3,857)	(5,546)	(71,560)	(57,300)	(24,035)	(18,630)	(180,928)

Notes: Same as Table 1.

4.6. *Social Class Origins: West*

One technical issue stands out for the West, namely small sample sizes. Hence, caution is required when one interprets the figures in Table 6. And yet, actual patterns should not differ from the patterns documented in the table. The proportion of farmers in the West was not as high as those in the Midwest and the South. Instead, industrialization took place in the West, but not as fast as in the East. This intermediate degree of industrialization in the West is reflected in the fact that the proportion of teachers from farms was the lowest in the West in 1880, but the combined proportion of middle class and lower class origins was second only to that of the Northeast in 1920.

4.7. *Intergenerational Mobility*

Regional and periodical differences notwithstanding, this paper explains above that, in general, teachers from the middle class and farm households were overrepresented compared to the general population. This general finding seems to contradict the often-heard notion that teaching provided a steppingstone for upward mobility.[27] One hypothesis that could reconcile this notion with this paper's findings is that teaching did play such a role, but it worked only for teachers from the middle class and farms, not for teachers from the lower class.

To test this hypothesis even roughly, it is necessary to quantify the social class of teachers and their fathers and compare both figures. Figure 1 displays trends in the distribution of the intergenerational gap of Duncan's SEI. Also, because of the controversy over the usefulness of composite measures of occupational standing, one example of dimension-specific indexes, occupational income standing, is additionally presented in Figure 2 for reference purposes. Notice that the general patterns depicted in Figures 1 and 2 are similar.

Three points stand out as a result. First, the gap is mostly positive, which indicates that teaching indeed helped teachers to raise their SES. Means of the gap never fell below 40 in the period of interest. Second, the mean gap gradually and consistently decreased from 51.5 in 1860 to 42.9 in 1920, and the downward trend of the average was largely attributable to a drop in the upper half of the distribution. This implies that teachers' social class origins gradually and consistently improved. Note that this phenomenon is consistent with high occupational barriers against women, which were only lowered starting from the Second World War onward.[28] Third, the standard deviation of the gap also gradually and consistently increased from 17.0 in 1860 to 24.8 in 1920. The gradual drop of the mode, attributable mostly to a decrease in the proportion of teachers from farming origins, illustrates the same phenomenon from another angle. The third finding suggests that teachers as a whole possessed a diverse socioeconomic background over time. Hence, although not rigorous, Figure 1 is supportive of the hypothesis that teaching provided a means to upgrade one's SES, but mostly for daughters from the middle class and farms, not for daughters from the lower class.

One may wonder whether these mobility patterns were universal or unique to white female teachers. Figure 3 suggests that the latter appears correct.[29] Black female teachers did experience upward mobility even more frequently than their white counterparts, but their social class origins did not improve; it

Table 6. Trends in the Social Class Origins of White Female Teachers: West

	1860	1870	1880	1900	1910	1920	All Years
Middle Class	n/a	0.00	27.81	21.41	24.62	26.88	24.15
	(8.14)	(13.94)	(15.83)	(18.04)	(17.47)	(19.30)	(17.42)
Farmers	n/a	0.00	36.09	36.29	33.67	33.13	34.97
	(40.27)	(36.72)	(35.27)	(32.02)	(24.87)	(26.70)	(30.45)
Lower class	n/a	100.00	36.09	42.30	41.71	40.00	40.87
	(51.58)	(49.34)	(48.90)	(49.95)	(57.65)	(54.00)	(52.13)
N	n/a	4	169	383	199	160	915
	(221)	(531)	(13,774)	(16,245)	(11,980)	(8,109)	(50,860)

Notes: Same as Table 1.

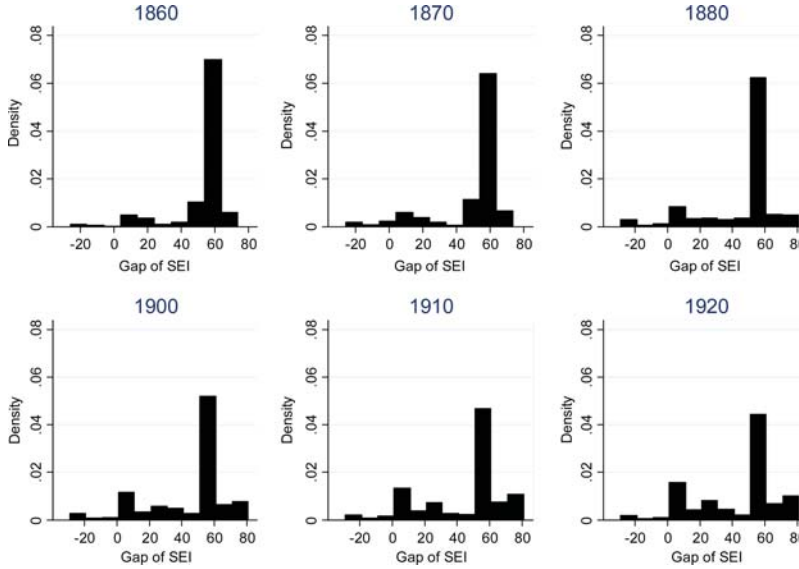

Figure 1. Trends in the Distribution of the Intergenerational Gap of Duncan's SEI: White Female Teachers. Notes: Samples are restricted to white female teachers who lived in nuclear families as children and whose fathers were present. Sample sizes for 1860 to 1920 are as follows: 349, 437, 7320, 7,423, 2,884, and 2,459. Means of the gap from 1860 to 1920 are as follows: 51.5, 48.8, 46.8, 44.7, 44.2, and 42.9. Standard deviations of the gap of SEI for 1860 to 1920 are as follows: 17.0, 20.7, 22.5, 24.0, 24.9, and 24.8.

actually worsened slightly. The gap slightly increased from 50.7 in 1880 to 51.4 in 1920. Moreover, their socioeconomic backgrounds became slightly less, not more, diverse as the standard deviation of 19.7 in 1880 dropped to 17.8 in 1900 before recovering to 19.0 in 1920.

4.8. Factors Related to Social Class Origins

So far, analyses have been limited to answering the question raised by Perlmann and Margo. This section goes beyond mere investigation and attempts to understand the social class origins of teachers more systematically. As illustrated in Sections 4.2–4.6, there were time and space differences in the origins. Also, farmers accounted for a large proportion of the origins, but the proportion became smaller with the passage of time. Furthermore, as industrialization and urbanization progressed, the socioeconomic backgrounds of teachers became more diverse. Although the above analyses are effective in describing broad trends in the origins, many factors are not held constant. Even if two fathers had been the same age and lived in the place of the same size in the same region in the same year, their SES would have differed depending on whether they were immigrants to the United States. Similar questions could be raised

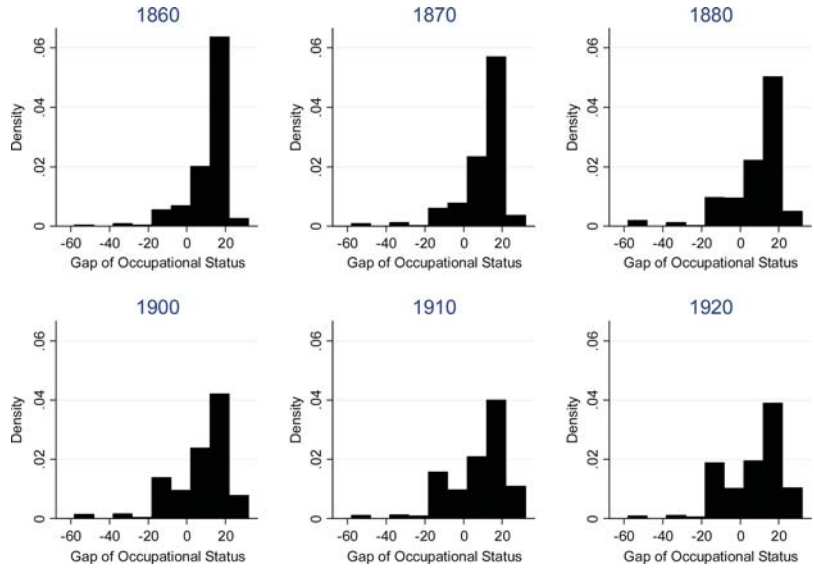

Figure 2. Trends in the Distribution of the Intergenerational Gap of the Occupational Income Score: White Female Teachers. Notes: Samples are restricted to white female teachers who lived in nuclear families as children and whose fathers were present. Sample sizes for 1860 to 1920 are as follows: 349, 437, 7320, 7,423, 2,884, and 2,459. Means of the gap from 1860 to 1920 are as follows: 8.3, 7.5, 5.8, 5.2, 5.6, and 4.8. Standard deviations of the gap from 1860 to 1920 are as follows: 9.6, 11.2, 13.5, 13.9, 14.2, and 14.1.

concerning other circumstances. Controlling for some relevant factors would help one understand the social class origins of teachers more precisely.

Table 7 initiates this exercise. The dependent variable is fathers' SEI. Independent variables are introduced gradually to specifications because by doing so one can appreciate which variable is more important and thus can correct misunderstandings. Note that this analysis is intended not to test any causality but to describe factors related to the social class origins of teachers and to measure their impact, so a simple OLS model is used. A tobit model is applied later for robustness checks, but OLS results remain the main focus. Independent variables are chosen that are considered useful for describing broad patterns of the origins within the boundaries that the data allow. Also, note that the sample is already conditioned on the fathers of white female teachers who lived in nuclear families. It is admitted upfront that this analysis is rather crude for the purposes of this paper. It would be better if we could access more and higher-quality personal and geographical variables associated with the origins, but unfortunately the IPUMS-USA provide only a limited number of variables. This research may lead to subsequent efforts for advancing our understanding of their social class origins.

Column 1 seems to suggest that the SEI of native fathers is not different from that of immigrant fathers, which is inconsistent with the historical fact

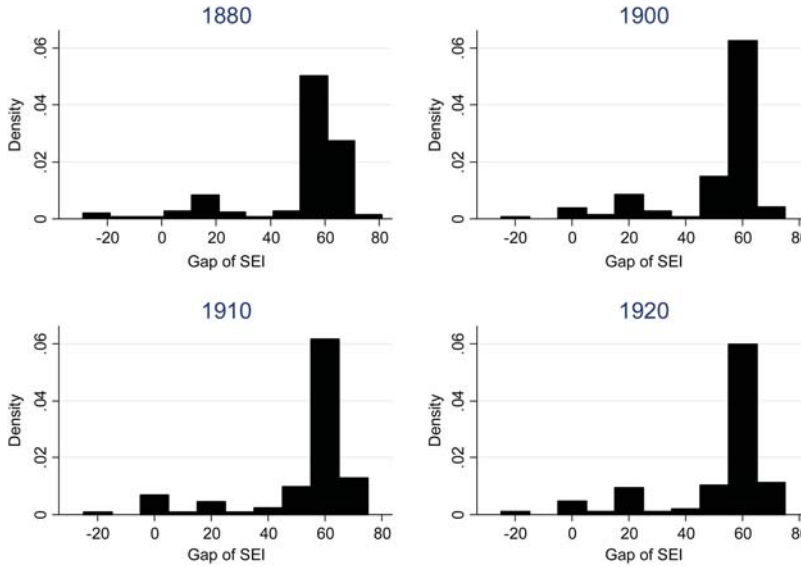

Figure 3. Trends in the Distribution of the Intergenerational Gap of Duncan's SEI: Black Female Teachers. Notes: Samples are restricted to black female teachers who lived in nuclear families as children and whose fathers were present. Sample sizes for 1880 to 1920 are as follows: 251, 256, 133, and 107. Means of the gap from 1880 to 1920 are as follows: 50.7, 50.3, 52.1, and 51.4. Standard deviations of the gap of SEI for 1860 to 1920 are as follows: 19.7, 17.8, 18.3, and 19.0.

that most of the immigrants came from the lower class.[30] Also, the SEI of fathers residing in the Midwest is 2.71 lower than that of fathers residing in the Northeast, but SEIs are not distinguishable at conventional levels of significance among fathers living in the Northeast, South, and West. Also, the SEI of fathers appears to be increasing. Specifically, compared with 1860, the level is 2.82 higher in 1870 and even 9.51 higher in 1920.

Recall that urbanization is usually related to economic development, so it is likely that people residing in urban areas enjoyed a higher SES. In fact, most immigrants resided in urban areas, the Northeast was the most urbanized region, and urbanization progressed further over time, all of which combine to compel us to control for urban status. When urban status is introduced, results dramatically change. One can find in Column 2 that the natives' SEI is 3.32, which is higher than the immigrants' SEI. The SEI of fathers residing in the Midwest is no longer lower than that of fathers residing in the Northeast. On the other hand, the SEIs of fathers residing in the South and West are higher. Also, the coefficients on all year dummies are lower than those in Column 1, which indicates that year dummies indeed capture the positive effects of urbanization. The high coefficient of 15.34 of urban status confirms that people residing in urban areas commanded higher SES.

Table 7. Factors Related to Duncan's SEI of Fathers

Estimator	OLS				Tobit
	1	2	3	4	5
Constant	-9.31	-13.17	-13.10	-8.92	-22.01
	(5.34)*	(5.11)**	(5.03)***	(4.78)*	(5.20)***
Father's Age	1.28	1.23	1.23	1.51	2.01
	(0.18)***	(0.17)***	(0.17)***	(0.16)***	(0.17)***
Father's Age Squared	-0.013	-0.013	-0.013	-0.015	-0.020
	(0.002)***	(0.001)***	(0.001)***	(<0.001)***	(0.001)***
Father's Nativity	0.49	3.32	3.98	4.20	4.28
	(0.40)	(0.39)***	(0.39)***	(0.37)***	(0.39)***
Midwest	-2.71	0.47	-0.17	1.26	1.07
	(0.37)***	(0.36)	(0.36)	(0.34)***	(0.37)***
South	0.35	3.83	3.62	5.38	5.43
	(0.50)	(0.49)***	(0.48)***	(0.46)***	(0.49)***
West	1.26	1.93	1.32	2.19	2.10
	(0.83)	(0.79)**	(0.78)*	(0.74)***	(0.80)***
1870	2.82	2.48	2.13	1.19	1.25
	(1.68)*	(160)	(158)	(150)	(160)
1880	5.53	3.76	3.09	2.38	2.46
	(1.28)***	(1.23)***	(1.21)**	(1.15)**	(1.23)**
1900	7.96	4.81	3.20	2.62	2.57
	(1.29)***	(1.23)***	(1.22)***	(1.16)**	(1.23)**
1910	8.21	4.66	2.95	1.85	1.46
	(1.33)***	(1.28)***	(1.26)**	(120)	(128)
1920	9.51	5.55	3.70	2.79	2.52
	(1.34)***	(1.29)***	(1.27)***	(1.21)**	(1.29)*
Urban		15.34	2.13	0.19	0.26
		(0.35)***	(0.66)***	(0.63)	(0.68)

Size of Place 1,000-9,999			13.68	3.38	3.44
			(0.57)***	(0.58)***	(0.63)***
Size of Place 10,000-99,999			14.35	4.23	4.37
			(0.82)***	(0.81)***	(0.87)***
Size of Place 100,000 +			17.93	7.49	7.63
			(0.82)***	(0.81)***	(0.88)***
Farm Household				-18.14	-17.13
				(0.39)***	(0.41)***
Adjusted (or Pseudo) R	0.020	0.105	0.132	0.216	0.024

Notes: Samples are restricted to fathers of white female teachers who lived in nuclear families. The sample size is 20,872. Size of place under 1,000 or unincorporated is omitted for size of place. The region of Northeast is omitted for census regions. Standard errors are in parentheses. ***: p-value <0.01, **: p-value < 0.05, *: p-value < 0.10.

One might argue that urban status per se does not matter but the size of place in which one resides does. Other things being equal, as more people live in a certain place, the market expands, which in turn creates occupations of higher SES. Hence, a series of dummies representing place sizes are further added to check this claim. Column 3 demonstrates that, although positive and statistically significant, the coefficient on urban status dummy loses nearly all of its effects. Rather, the three dummies of size of place indicate that as the place of residence became larger, the SEI tended to increase. Hence, it seems that size of place was more influential than urban status per se for fathers' SES.

Finally, recall that farmers (owner and tenant) accounted for a large proportion of occupations and they were likely to live in rural areas and places of small size. Hence, one could surmise from Columns 1 and 2 that the variables of urban status and size of place pick up the effects of being farmers. Column 4 reports results that are consistent with this supposition. The coefficient on urban status loses all of its effects, and the sizes of the coefficients on size of place dummies drop substantially. In addition, the size of the coefficient on Father's nativity increases further along with the sizes of the coefficients on region dummies. The coefficients on year dummies become smaller and more or less constant across years, meaning that the SEI did not increase with the passage of time when other variables are held constant.

Zero is assigned to fathers without occupations, so left censoring might bias results of Column 4. Because only 1,525 out of 20,872 fathers have zero SEI, this should not be a major concern. To alleviate this concern, however, a tobit is run on the same sample. Column 5 verifies that left censoring does not introduce a serious bias.

One may wonder how certain factors are closely related to increases in intergenerational upward mobility. A simple exercise would be to replace the SEI of the father's occupation with the difference between the SEI of the daughter's occupation and the SEI of the father's occupation in the specification for Column 4. In this case, however, this exercise would be redundant because there is only one SEI for the daughter's occupation, that is, 72 for a teacher. If the specification were run with the new dependent variable, all coefficients would be exactly the same as those in Column 4 only with the signs reversed. Thus, just by examining Column 4, one can appreciate that upward mobility was most enjoyed by teachers whose fathers were immigrants, who resided in small places in the Northeast in early years, and who came from farms.

4.9. Wealth of Farming Fathers

Before concluding this paper, one question still begs answers. Note that a large proportion of teachers came from farms, and, with the exception of the South in early years, they were overrepresented relative to the general population. The previous subsection also confirms that having farming fathers is critical to explaining the upward mobility of white female teachers. Can we say that teaching was an engine of upward mobility into the middle class for them? There is no definitive answer to this question as of yet. Before answering this question, one needs to determine first whether teachers whose fathers were farmers belonged to the middle class. If they did, teaching was not the kind of an engine. If not, teaching succeeded in playing that role although not for

daughters from the lower class. However, the latter may not be the case in certain respects. Considering the underrepresentation of the origin of farmer in the South where income inequality was higher than in other regions, it appears that mainly the daughters of well-to-do farmers would enter teaching.

Although imperfect, the data provide a way to discern which case is more consistent with evidence. In Table 8, white female teachers whose fathers were farmers were divided by home ownership and mortgage status of their fathers. Also, figures of the same sort for the general population defined as Table 1 are listed in parentheses. An additional restriction is that they were farmers. Years concerned in the table pertain to 1900 to 1920 because the variables are unavailable before 1900. The assumption is that fathers that owned houses without mortgages were the wealthiest, followed by fathers who owned houses with mortgages and fathers that rented houses. In particular, considering the relatively low prices of houses in rural areas, renting may indicate poverty, possibly extreme poverty. It is granted that home ownership and mortgage status are only two indicators for wealth. Wealth can be accumulated in a variety of ways such as land, cattle, stocks, and bonds, and they can be close substitutes. Suppose that Father 1 owned a house without a mortgage but had no lands, whereas Father 2 rented a house but possessed a large tract of land. In this case, the total wealth of the latter could be greater than that of the former. And yet, note that the aggressive investment scheme as done by Father 2 is likely to take place during an early age. Considering that most of the fathers studied in the sample were old, home ownership and mortgage status should be sufficiently precise indicators for wealth.

The first row of Table 8 indicates that slightly more than half of the fathers owned houses without mortgages from 1900 to 1920. And yet, compared to the general population, the fathers of teachers became more overrepresented over time although the size is small: 56.8 percent of the fathers owned houses without mortgages; this figure is almost identical to that of the general population, that is, 56.6 percent. In 20 years, the former increased to 58.0 percent whereas the latter decreased to 54.4 percent, with a gap of 3.6 percentage points. The increasing gap in wealth reinforces the argument put forth in

Table 8. Trends in the Distribution of White Female Teachers Whose Fathers Were Farmers by Home Ownership and Mortgage Status

	1900	1910	1920	All Years
Owned without Mortgage	56.77	58.93	58.03	57.46
	(56.55)	(57.28)	(54.42)	(56.38)
Owned with Mortgage	31.85	30.02	30.49	31.21
	(23.88)	(22.74)	(25.06)	(23.83)
Rented	11.39	11.05	11.48	11.33
	(19.57)	(19.98)	(20.51)	(19.79)
N	3,030	1,086	915	5,031
	(101,400)	(31,575)	(23,117)	(156,092)

Notes: Numbers in parentheses represent corresponding proportions for white male household heads and farmers aged between 45 and 75 inclusive who lived in non-group quarter households. "All years" include years between 1900 and 1920. Samples are restricted to white female teachers who lived in nuclear families as children and whose fathers were present and farmers.

Table 1 that teachers came from wealthier families at least up to 1920. If mortgage status represents one's credit status and indirectly wealth, home ownership with mortgages indicates middle class status or at least non-poor status. The second row demonstrates that teachers from this group were overrepresented across the years. On the other hand, white female teachers who resided in rented houses were underrepresented. For example, they accounted for 11.4 percent of all teachers in 1900, but the figure for the general population was 19.6 percent. The gap did not vary from 1900 to 1920. Overall, the evidence suggests that daughters of poor farmers had difficulty in experiencing upward mobility through teaching.

5. Concluding Remarks

In the midst of attention to institutions, teachers only sporadically appear in the history of U.S. education. Thus, it is not surprising that tracing their social class origins is a virtually novel territory. Some efforts have been made, but most of them were neither systematic nor comprehensive. This paper attempts to improve one's understanding of the social class origins of U.S. teachers from 1860 to 1920 using the IMPUS-USA. The immediate question is whether teaching lifted the well-educated daughters of skilled and unskilled workers up to middle class status. Our short answer is no. Mostly, people from the middle class and farms engaged in teaching, and it is they who enjoyed the fruits of upward mobility through the channel of teaching. The evidence suggests that the answer is the same even when teachers from farms are examined. Furthermore, an OLS is used to appreciate the origins more systematically. It is found that the SES of a father is higher if he is a native, non-farmer residing in a place of large size outside the Northeast in later years. The daughters of fathers with characteristics opposite to those described above improved their SES the most.

This paper is mainly descriptive. Many analytical questions about causes and consequences are left out. One may ask why teachers came mostly from the middle class or non-poor farms. An answer might be that the education required to become a teacher could be provided only by families with certain levels of wealth. If so, another question is in order: why did the levels of wealth drive mostly women instead of men into teaching? Superior outside opportunities for men might be a good candidate for the answer. One may also like to know how their class origins affected the content of curricula. The consequence might be that the rules and disciplines of the middle class were inculcated to students regardless of the social class origins of students. Furthermore, although the groups of white male teachers and female black teachers were briefly discussed, elaboration on them would make one's understanding of the social class origins of teachers more comprehensive. It is uncertain whether appropriate quantitative data are available to answer these questions even partially, but future research may benefit from this paper for the pursuits.

Appendix

Estimations are mainly done for white female teachers. The white race is the focus because they comprise the absolute majority of U.S. teachers. For

example, even in 1940 when more teachers of other races including black were present in the profession, white teachers accounted for 93.3 percent of the teaching force. Women among white teachers receive disproportionate attention in this paper mostly because their sample size is large and can be safely considered representative of the teaching profession. Specifically, consider Table A.1. Female teachers were already numerically dominant in 1860 and feminization progressed still further up to 1920, when 84.0 percent of white U.S. teachers were female. A father's occupation can be identified in the data only if (1) the female teacher lived with her father, (2) she was a child to him, and (3) he was present. For Condition (1), Table A.2 demonstrates that slightly less than 70 percent of white female teachers lived in nuclear families up to 1920. In contrast, the proportion was higher for white male teachers than their female counterparts, so white male teachers satisfy Condition (1) better than white female teachers. And yet, as shown in Table A.3, the majority of white male teachers were fathers rather than children, whereas slightly less than 90 percent of female white teachers were children up to 1920. The reason for the significant proportion of children is mostly attributable to the marriage bar de jure or de facto, which essentially prevented married women from teaching. Hence, white female teachers satisfy Condition (2) better than their male counterparts. Thus far, two patterns emerge that make the period beyond 1920 less useful for the purpose of this paper. First, feminization tapered off in 1930, which makes white female teachers less representative of the profession beyond 1920. Second, as the marriage bar began losing its potency in 1930, the proportion of spouses in Table A.3 jumps from 8.7 percent in 1920 to 22.4 percent in 1930 and further to 29.8 percent in 1940. The second pattern makes female teachers who lived in nuclear families less representative of the profession.

Even if a female teacher lived in a nuclear family, it is not necessarily the case that her father was present, that is, satisfying Condition (3) is not automatic. As Table A.4 illustrates, 22.7 percent of white female teachers did not have fathers at home during the period of 1860 to 1920 even if they lived in nuclear families, which is partly attributable to old age and eventual death of their fathers. As requirements for teaching became stringent, the median age of white female teachers rose, and consequently their fathers' ages did as well. In 1860, the median age of white female teachers who lived in nuclear families was 20. In the same year, the median age of their fathers was only 52 if they were present. The corresponding ages rose to 27 and 60, respectively, by 1920.

It is granted that white female teachers during the period from 1860 to 1920 are not perfectly nationally representative of the teaching profession. White female teachers who lived in nuclear families were not likely to be the same as those who had different living arrangements. Even among white female teachers who lived in nuclear families, white female teachers as children cannot be considered to be the same as those who were spouses or household heads. Even among the white female teachers living in nuclear families as children, they had different characteristics depending on the presence of fathers. And yet, considering the size of this group out of the total teaching staff, the bias should be small, although it is difficult to measure the size of the bias. The addition of this small bias is the price to pay for obtaining a sample that contains information on the social class origins of U.S. teachers during the period.

Table A.1. Trends in the Distribution of White Teachers by Gender

	1860	1870	1880	1900	1910	1920	1930	1940	All Years
Male	39.51	32.77	30.95	25.39	19.88	15.99	18.88	25.08	25.14
Female	60.49	67.23	69.05	74.61	80.12	84.01	81.12	74.92	74.86
N	1,139	1,349	23,117	20,898	7,974	6,829	9,742	9,603	80,651

Notes: "All years" include years between 1860 and 1940.

Table A.2. Trends in the Distribution of White Teachers by Living Arrangement and Gender

	Living Arrangements	1860	1870	1880	1900	1910	1920	1930	1940	All Years
Male	Nuclear Families	68.22	71.95	71.79	76.48	75.21	81.59	79.55	81.81	75.63
	Distant Relatives	7.56	6.33	6.02	5.88	4.61	3.21	2.72	2.74	5.07
	Non-relatives	22.00	15.84	17.24	12.87	16.09	13.00	13.32	9.76	14.61
	Group Quarters	2.22	5.88	4.95	4.77	4.10	2.20	4.40	5.69	4.69
	N	450	442	7,154	5,307	1,585	1,092	1,839	2,408	20,277
Female	Nuclear Families	69.38	66.92	64.94	69.40	67.54	67.37	60.74	65.06	66.14
	Distant Relatives	12.63	10.25	10.64	11.44	9.80	8.98	7.64	7.06	9.80
	Non-relatives	15.09	16.76	17.92	13.31	16.64	16.05	22.07	16.48	16.74
	Group Quarters	2.90	6.06	6.50	5.85	6.03	7.60	9.55	11.40	7.32
	N	689	907	15,963	15,591	6,389	5,737	7,903	7,195	60,374

Notes: The first distinction is made whether or not the individual lived in group quarters. Among individuals who did not live in group quarters, they are distinguished based on with whom they lived. Nuclear families consist of parents, spouses, and children. Distant relatives consist of the rest of relatives. "All years" include years between 1860 and 1940.

Table A.3. Trends in the Distribution of White Teachers Who Lived in Nuclear Families by Relationship to Household Head and Gender

	Relationship to Household Head	1860	1870	1880	1900	1910	1920	1930	1940	All Years
Male	Head/Householder	47.56	58.81	57.96	53.83	60.23	72.84	79.63	84.47	63.19
	Spouse	0.00	0.00	0.02	0.02	0.00	0.00	0.07	0.00	0.02
	Child	52.44	41.19	42.02	46.14	39.77	27.16	20.30	15.53	36.79
	N	307	318	5,136	4,059	1,192	891	1,463	1,970	15,336
Female	Head/Householder	5.86	5.60	5.24	6.40	7.35	9.11	14.92	24.44	9.58
	Spouse	6.07	4.61	4.50	3.72	5.24	8.72	22.44	29.78	9.92
	Child	88.08	89.79	90.27	89.87	87.42	82.17	62.65	45.78	80.50
	N	478	607	10,367	10,820	4,315	3,865	4,800	4,681	39,933

Notes: "All years" include years between 1860 and 1940.

Table A.4. Trends in the Distribution of White Female Teachers Who Lived in Nuclear Families by Presence of Father

	1860	1870	1880	1900	1910	1920	All Years
Not Present	17.10	19.82	21.78	23.66	23.54	22.58	22.68
Present	82.90	80.18	78.22	76.34	76.46	77.42	77.32
N	421	545	9,358	9,724	3,772	3,176	26,996

Notes: "All years" include years between 1860 and 1920.

One could argue that the bias would be smaller if male teachers who satisfy the same criteria are added to the current sample, namely white male teachers who lived in nuclear families and whose fathers were present. However, the addition would make the sample more heterogeneous because male teachers were very different from female teachers with regard to motivations for teaching, career prospects, education levels, work experience, tenure, and so on. Thus, social class origins are briefly provided for this select male group separately in Table 2 for reference purposes.

Endnotes

1. Geraldine J. Clifford, "Saints, Sinners, and People: A Position Paper on the Historiography of American Education," *History of Education Quarterly* 15 (1975): 262.

2. Joel Perlmann and Robert Margo, "Who Were America's Teachers? Toward a Social History and a Data Archive," *Historical Methods* 22 (1989): 71. This question presumes that teaching was a desirable occupation for women. Among many aspects of desirability, the aspect of pecuniary compensations should be one of the most important aspects. Because wages were much lower for female teachers compared with male teachers in the period of interest, one could be misled that teaching was not desirable for women. In addition, Perlmann and Margo surmise that "the wages offered to women teachers may not have been much higher than those of female domestics" in the early nineteenth century. See Joel Perlmann and Robert A. Margo, *Women's Work? American Schoolteachers 1650-1920* (Chicago, IL, 2001): 32. However, this notion is far from the truth. Even when the education system was loosely organized and teaching did not require high levels of education in the first half of the nineteenth century, teaching in common school offered higher wages to female workers than other occupations. Variations in terms of employment notwithstanding, for example, female common school teachers in Lowell, MA were paid 3.5 dollars per week in 1837 compared with 2.75 dollars for textile workers in Chicopee, MA in 1832, or 3.25 dollars for female textile operatives in Lowell, MA in 1836. The wage gap is even larger compared with 0.34 dollars for palm-leaf hatmakers in Fitzwilliam, NH in 1830. See Kim Tolley and Nancy Beadie, "Socioeconomic Incentives to Teach in New York and North Carolina: Toward a More Complex Model of Teacher Labor Markets, 1800-1850," *History of Education Quarterly* 46 (2006): 53. Of course, the above evidence does not concern the period of interest and is not representative of the country. However, even both issues are taken into account, "teaching was a *good job*" for women (original italics). See Susan B. Carter and Mark Prus, "The Labor Market and the American High School Girl 1890-1928," *Journal of Economic History* 42(1982): 166. For example, according to the 1900 census, the average weekly earnings of female workers was 6.5 dollars in the cotton and woolen

mills, if high, and 3.5 dollars in candy factories, if low, which were much lower than 9.73 dollars for female school teachers. Ibid., 165-166.

3. Lotus D. Coffman, *The Social Composition of the Teaching Population* (New York, 1911).

4. Ibid., chapter 1.

5. Ibid., 59.

6. Ibid., 73

7. Clyde M. Hill, *A Decade of Progress in Teacher Training* (New York, 1927); Mary L. Moffett, *The Social Background and Activities of Teachers College Students* (New York, 1929).

8. Sarah H. Gordon, "Smith College Students: The First Ten Classes, 1879-1888," *History of Education Quarterly* 15 (1975): 147-167. Eight out of 11 Smith students of class 1879 worked in school as teachers or administrators but only 13 out of 48 Smith students of class 1888 did so.

9. Ibid., 152.

10. Richard M. Bernard and Maris A. Vinovskis, "The female school teacher in Anti-Bellum Massachusetts," *Journal of Social History* 10 (1977): 332-345.

11. Ibid., 336.

12. Ibid.

13. Ibid.

14. Ibid., 334.

15. See Perlmann and Margo, "Who Were America's Teachers?," 68-70.

16. The following data sets are used: 1 percent sample with black oversample for 1860 and 1870, 10 percent sample for 1880, 5 percent sample for 1900, 1.4 percent sample for 1910, and 1 percent samples for 1920, 1930, and 1940. Data for 1890 do not exit. Oversamples are used whenever possible to investigate the social class origins of black teachers.

17. For example, see Willard S. Elsbree, *The American Teacher: Evolution of a Profession in a Democracy* (New York, 1939), Chap. 18; Perlmann and Margo, *Women's Work?*, Chap. 1.

18. For further discussion, see Robert W. Hodge, "The Measurement of Occupational Status," *Social Science Research* 10 (1981): 396-415; Keiko Nakao, "Review: Occupations and Stratification: Issue of Measurement," *Contemporary Sociology* 21 (1992): 658-662; Robert M. Hauser and John Robert Warren, "Socioeconomic Indexes for Occupations: A Review, Update, and Critique," *Sociological Methodology* 27 (1997): 177-298; Charles B. Nam, *Comparison of Three Occupational Scales*. Florida State University, Center for Demography and Population Health. Working Paper (Tallahassee, FL, 2000).

19. Otis D. Duncan, "A Socioeconomic Index for All Occupations," in *Occupations and Social Status*, ed. Albert J. Reiss Jr. et al. (New York, 1961): 139-161. Depending on one's point of view, Duncan's scores are regarded as not social class scores but socioeconomic scores or occupational prestige scores. Without being bogged down in the debate on concepts of Duncan's SEI, I reiterate that social class is measured by Duncan's SEI in this paper.

20. Sheila R. Klatzky and Robert W. Hodge, "A Canonical Correlation Analysis of Occupational Mobility," *Journal of the American Statistical Association* 66 (1971): 16-22.

21. A nuclear family referred to in this paper consists of father, mother, and children. There are other ways to define nuclear family, but this definition is used because it is usually considered the most immediate family unit. Slightly varying the definition does not change the substance of results.

22. Bernard and Vinovskis, "The Female School Teacher in Anti-Bellum Massachusetts," 336.

23. Coffman, *The Social Composition of the Teaching Population*, 73.

24. Samples of the general population are selected to be comparable to fathers of white female teachers. Specifically, the samples are restricted to white male household heads aged between 45 and 75 inclusive who lived in nongroup quarter households. Samples of regional populations are similarly selected for each region.

25. See Jeffrey Williamson and Peter Lindert, *American Inequality: A Macroeconomic History* (New York, 1980).

26. One must not put much faith in figures for years of 1860 and 1870 because of their small sample sizes, but as far as patterns are concerned, the figures do not deviate much from the broad patterns.

27. The notion can be found in, for example, Polly Welts Kaufman, *Women Teachers on the Frontier* (New Haven, CT, 1984); Kathleen Weiler, *Country Schoolwomen: Teaching in Rural California, 1850-1950* (Palo Alto, CA, 1998); Chris Enss, *Frontier Teachers: Series of Heroic Women of the Old West* (Guilford, CT, 2008).

28. See Joseph A. Kershaw and Ronald N. McKean, *Teacher Shortages and Salary Schedules* (Santa Monica, CA, 1961); Susan B. Carter, "Occupational Segregation, Teachers' Wages, and American Economic Growth," *Journal of Economic History* 46 (1986): 373-383.

29. The years of 1860 and 1870 are omitted because few observations are available. Other races are omitted because of their small sample sizes.

30. See Maldwyn A. Jones, *American Immigration*. 2nd ed. (Chicago, 1992), chaps. 5, 8.